

BOOK REVIEWS

A New Text for College Botany

The Plant World, A Text in College Botany. By Harry J. Fuller. Henry Holt and Co. 1941. Pp. 592. \$3.25.

Another excellent text has been added to the ones planned for a first course in college botany. With so many excellent texts already a new one should justify itself by some difference in its approach to the subject, in the aspects of the science stressed, or in the special group of students for which it is planned. In the preface the present text explains that it is for "students who are registered in elementary botany courses principally because of the cultural and general educational value of the subject" and who presumably will take no other courses in biological subjects. With this in mind the author has chosen and arranged the subject matter with the idea of arousing the interest of the students at the start by associating the study of plants with their everyday experiences. The primary objective given is "the presentation of the fundamental features of structures, physiological activities, and reproduction of flowering plants." Considerably more than half the book is devoted to this main objective. Of several secondary objectives the presenting of a generalized account of plant evolution is given last, with the suggestion that the section of the book treating it and plant ecology may be omitted. Thus many students using the text will undoubtedly finish the course without getting even the brief description of evolution given in the text. The structure and classification of plants below the Spermatophytes is given very briefly, as is heredity and plant breeding.

The short introductory chapters on the history of botanical study and on the nature and origin of life are well done and should stimulate interest at the start. Conforming to the announced objectives the classification of plants is taken up only briefly, using as "a pedagogical concession" the old grouping into Thallophytes, Bryophytes, Pteridophytes and Spermatophytes; though an outline of a more modern system of classification is given in an appendix.

Illustrations are many and excellent, the drawings, photographs and photomicrographs are good and well reproduced and are chosen to really illustrate the text. The frontispiece is a beautiful

colored picture of a *Cattleya*, but, as is often the case in text books, it is merely a pretty picture not in any way important to the book.

As in nearly all college science texts—and the same is true in only slightly less degree of high school texts—the student will meet here nearly as many new terms as he will new words in the first year of a foreign language. The glossary gives nearly 600 technical terms, most of which will be new to the student, while others (such as xeromorphic, polyploidy, photophobic) used in the text are not given in the glossary. It may be difficult to draw the line as to which scientific terms should be included and which omitted in a book of this kind, but for students most of whom will take no further botany it seems unreasonable to require the learning of scores of words used but once in the text—and there with an explanation—and which they may never in their lives meet again.

There is nothing in the text to suggest laboratory or field work, nor references to further reading. Each chapter is followed by a concise summary, which correctly used, will be a definite help in mastering and organizing the facts given. The language throughout is clear and easily understood, so that the book may be read by a beginner with pleasure. It should satisfactorily fulfill the author's objective for the course. It will be a valuable text wherever a cultural course in botany, not to be followed by more advanced work, is given. The reviewer hopes that whenever the text is used part IV—"The Distribution of Plants in Time and Space" will not be omitted.

GEORGE T. HASTINGS

The Advance of the Fungi

The Advance of the Fungi. By E. C. Large. Henry Holt and Co., New York. 1940. Pp. 488. \$4.

Under the above title one would naturally expect to find a discussion of either the phylogeny of fungi in general or a mycological treatise. A glance at the chapter headings may have a rather discouraging effect on the young plant pathologist, for here he would find little information about individual plant diseases, which might be expected in a work on plant pathology. Nevertheless, the author deals primarily with plant-pathological problems, availing himself on every occasion of setting forth some of his philosophical or sociological ideas.